

# L-Kynurenine Antibody – Mouse Monoclonal

Ref: IS003

Our anti-L-Kynurenine antibody IS1003 enabled to illustrate, for the first time, the presence of L-kynurenine in human brain and tumor samples by IHC and IF. This mouse monoclonal antibody can be used in combination with other primary antibodies to kynurenine metabolites (rabbit polyclonals available).

**Clonality** Monoclonal antibody (clone 3D4-F2)

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**Host** Mouse

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**Validated applications** [IHC](#) / [IF](#)

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**Reactivity** Reacts with all species

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**Format** 50µL

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**References** [Cited in 9 papers](#)

# INFORMATIONS

## Product overview

<b>Product name</b>	L-Kynurenine antibody
<b>Synonyms</b>	(S)-Kynurenine antibody L-2-Amino-4-(2-aminophenyl)-4-oxobutanoic acid antibody Kynurenin antibody 3-Anthraniloyl-L-alanine antibody,
<b>Immunogen</b>	Conjugated L-Kynurenine
<b>Isotype</b>	IgG1 k chain
<b>Clone</b>	clone 3D4-F2
<b>Specificity</b>	When tested in competitive ELISA, the anti-L-Kynurenine antibody did not show any significant cross reactivity with L-Tryptophan, 3-hydroxy-DL-Kynurenine, Kynurenic acid, Anthranilic acid or 3-hydroxyAnthranilic acid conjugates

## Storage

<b>Form</b>	Liquid
<b>Purity</b>	Purified IgG
<b>Concentration</b>	0,5mg/ml
<b>Storage</b>	Store at +4°C for short term (1-2 months). Aliquot and store at -20°C for long term. Avoid repeated freeze / thaw cycles
<b>Material safety datasheet</b>	<a href="#">Download MSDS</a>

## PROTOCOLS

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<b>Immunohistochemistry (IHC)</b>	Dilute at 1:200-1:2000. Perform heat antigen retrieval (pH=6) before initiating IHC staining protocol on paraffin-embedded and frozen sections
<b>Immunofluorescence (IF)</b>	Dilute at 1:100-1:1000 on paraffin-embedded and frozen sections. Before staining, perform heat antigen retrieval
<b>Comments</b>	Optimal working dilutions must be determined by the end-user
<b>Restrictions</b>	For research use only

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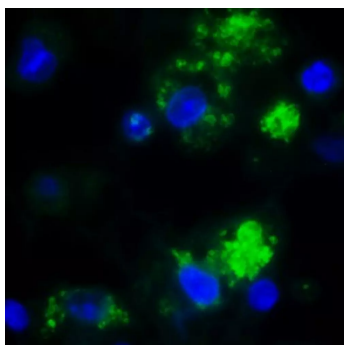
## REFERENCES

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### Product citations

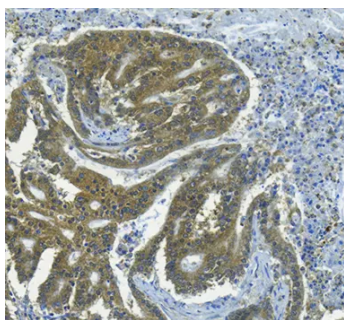
## Product pictures

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### L-Kynurenine visualization in human intestinal immune cells by IF

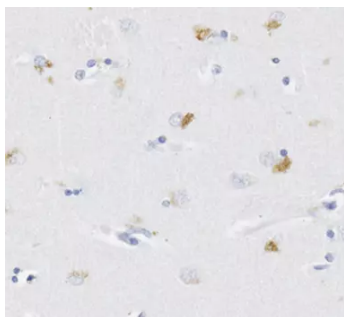
Immunofluorescence staining reveals L-Kynurenine accumulation in specific immune cells in human colon tissue. Paraffin-embedded tissue section was subjected to pH=6 antigen retrieval followed by overnight incubation with primary antibody (dilution 1/250). After incubation with Alexa-488 conjugated secondary Ab, epifluorescence microscopy (100X) was used to visualize IF staining.



### L-Kynurenine detection in human colon cancer tissue by IHC

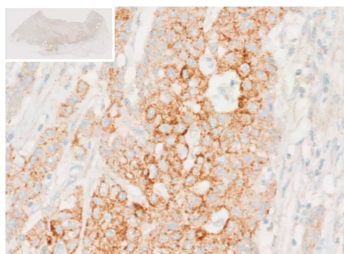
Immunohistochemical staining of human colorectal cancer tissue shows cytoplasmic accumulation of L-Kynurenine in tumour cells. Paraffin-embedded tissue section was subjected to pH=6 antigen retrieval, and overnight incubation with primary antibody (1/500 dilution). A polymer-conjugated secondary Ab was added and immunostaining was revealed using DAB.

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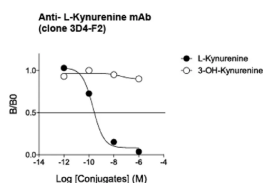
### L-Kynurenine detection in human brain tissue by IHC

Detection of L-Kynurenine in glial cells in human caudate putamen. Paraffin-embedded tissue section was subjected to pH=6 antigen retrieval followed by overnight incubation with primary antibody (dilution 1/500). After incubation with polymer-conjugated secondary Ab, DAB was used to visualize the staining



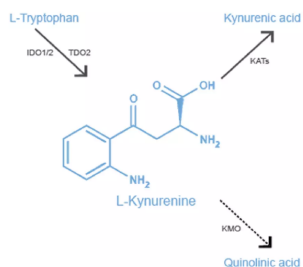
### Immunohistochemical analysis reveals accumulation of L-Kynurenine within tumor cells of human colorectal cancer (CRC) tissue.

Using DiscoveryUltra™ platform (Ventana), a paraffin-embedded tissue section of CRC was subjected to antigen retrieval, and incubation with primary anti-KYN monoclonal antibody. Presence of Kynurenine was then evaluated through the use of a DAB conjugated secondary antibody. Image (x40 magnification) was acquired using Polaris Vectra (Perkin Elmer) automated slide scanner.



### Affinity & Specificity of anti- L-Kynurenine mAb 3D4-F2

Competitive ELISA demonstrates that low amounts of L-Kynurenine conjugate are required to abolish antigen-antibody reaction (high affinity), while rising concentrations of 3-OH-Kynurenine conjugate do not affect reaction (high specificity).



### L-Kynurenine

L-Kynurenine, the first stable by-product of the kynurenine pathway, is synthesized from L-Tryptophan by indoleamine 2,3-dioxygenase (IDO1/2) or tryptophan 2,3-dioxygenase (TDO2) enzymes. Acting as an endogenous ligand of Aryl hydrocarbon Receptor (AhR), L-Kynurenine exerts anti-inflammatory effects and promotes glioma progression. L-kynurenine is also widely used as a biomarker of tryptophan catabolism and kynurenine pathway activation in immune-related and neurological disorders.

## Contact information

Immusmol  
229 Cours de l'Argonne

Product Data Sheet IS003

33 000 Bordeaux - France

Tel: +33 (0) 5 6431 1170

[www.immusmol.com](http://www.immusmol.com)

**To order, review, ask for technical support, visit product page at:**

<https://www.immusmol.com/shop/l-kynurenine-mab/>